

What is claimed is:

1. A printing system comprising:

a plurality of image forming apparatuses that carry
5 out image formation on a sheet;

a margin storage device that stores margins in
which no image is formed in the image formation carried
out by each of said plurality of image forming
apparatuses;

10 an optimum margin selecting device that selects an
optimum margin having a maximum value from among the
margins for each of said plurality of image forming
apparatuses, stored by said margin storage device;

an image area calculating device that calculates an
15 effective image area found from the optimum margin
selected by said optimum margin selecting device and a
size of the sheet on which the image formation is to be
carried out; and

an image data adjusting device that adjusts image
20 data for each of said plurality of image forming
apparatuses such that an image to be formed based on the
image data fits within the effective image area
calculated by said image area calculating device.

2. A printing system according to claim 1,
25 wherein said margin storage device stores respective
margins at four ends of the sheet, and said optimum
margin selecting device selects the optimum margin

having the maximum value for each of the four ends.

3. A printing system according to claim 1,
wherein said margin storage device, said optimum margin
selecting device, said image area calculating device,
5 and said image data adjusting device are provided in one
of said plurality of image forming apparatuses.

4. A printing system according to claim 1,
further comprising an image data server that distributes
image data to said plurality of image forming
10 apparatuses, and wherein said margin storage device,
said optimum margin selecting device, said image area
calculating device, and said image data adjusting device
are provided in said image data server.

5. A printing system according to claim 1,
15 comprising an input device that inputs the margins to be
stored by said margin storage device through setting
operations by a user.

6. A printing system according to claim 1,
further comprising a collecting device that collects
20 margins from said plurality of image forming apparatuses,
transmits the margins to said margin storage device to
cause said margin storage device to store the margins.

7. A printing system according to claim 1,
wherein said image data adjusting device reduces the
25 size of the image such that the image to be formed based
on the image data fits within the effective image area.

8. A printing system according to claim 1,

wherein said image data adjusting device erases part of the image which is located outside the effective image area.

9. A printing system according to claim 1,
5 wherein said image data adjusting device shifts part of the image which is located outside the effective image area into the effective image area.

10. A printing system according to claim 1,
wherein said image data adjusting device adjusts the
10 image data for each of said plurality of image forming apparatuses using one method selected by a user from among a plurality of image data adjusting methods for fitting the image within the effective image area calculated by said image area calculating device.

15 11. A printing system comprising:
a plurality of image forming apparatuses that carry out image formation on a sheet;

a margin storage device that stores margins in which no image is to be formed in the image formation
20 carried out by each of said plurality of image forming apparatuses;

an optimum margin selecting device that selects an optimum margin having a maximum value from among the margins for each of said plurality of image forming
25 apparatuses, stored by said margin storage device;

an image area calculating device that calculates an effective image area found from the optimum margin

selected by the optimum margin selecting device and a size of the sheet on which the image formation is to be carried out;

an out-of-area image determining device that
5 compares the effective image area calculated by said image area calculating device with an image to be subjected to the image formation carried out by each of said plurality of image forming apparatuses, and determines whether part of the image is located outside
10 the effective image area; and

a display device that displays a warning when said out-of-area image determining device determines that part of the image is located outside the effective image area.

15 12. A printing system according to claim 11, wherein said out-of-area image determining device is provided in one of said plurality of image forming apparatuses.

13. A printing system according to claim 11,
20 further comprising an image data server that distributes image data to said plurality of image forming apparatuses, and wherein said out-of-area image determining device is provided in said image data server.

14. A printing system according to claim 11,
25 further comprising a processing control device operable when said out-of-area image determining device determines that part of the image is located outside of

the effective image area, for providing control to continue or discontinue the image formation in accordance with an instruction from a user.

15 15. A printing system according to claim 11,
further comprising a host apparatus that instructs each
of said plurality of image forming apparatuses to carry
out distributed image formation, and wherein said out-
of-area image determining device and said display device
are provided in said host apparatus, said host apparatus
10 operating said out-of-area image determining device and
said display device before instructing each of said
plurality of image forming apparatuses to carry out the
distributed image formation.

15 16. A printing system comprising:
a plurality of image forming apparatuses that are
capable of carrying out distributed image formation
according to an image forming job distributed to the
plurality of image forming apparatuses;
an image area detecting device that detects a
20 minimum size among maximum sizes in which image
formation can be carried out by respective ones of said
plurality of image forming apparatuses, and regards an
area of the detected minimum size as a common effective
image area; and
25 an image data adjusting device that adjusts image
data to be subjected to the distributed image formation
carried out by each of said plurality of image forming

apparatuses such that an image to be formed based on the image data fits within the common effective image area detected by said image area detecting device.

17. A printing system according to claim 16,
5 wherein said image data adjusting device reduces a size of the image such that the image to be formed based on the image data fits within the common effective image area.

18. A distributed image forming method applied to
10 a printing system that includes a plurality of image forming apparatuses, and distributes an image forming job to the plurality of image forming apparatuses to cause the plurality of image forming apparatuses to carry out distributed image formation, comprising:
15 a storing step of storing margins in which no image is to be formed in the image formation carried out by each of the plurality of image forming apparatuses;
a selecting step of selecting an optimum margin having a maximum value from among the margins for each
20 of the plurality of image forming apparatuses, stored in said storing step;
a calculating step of calculating an effective image area found from the optimum margin selected in said selecting step and a size of the sheet on which the
25 image formation is to be carried out; and
an adjusting step of adjusting image data for each of said plurality of image forming apparatuses such that

an image to be formed based on the image data fits within the effective image area calculated in said calculating step.

19. A distributed image forming method applied to
- 5 a printing system that includes a plurality of image forming apparatuses, and distributes an image forming job to the plurality of image forming apparatuses to cause the plurality of image forming apparatuses to carry out distributed image formation, comprising:
- 10 a storing step of storing margins in which no image is to be formed in the image formation carried out by each of the plurality of image forming apparatuses;
- a selecting step of selecting an optimum margin having a maximum value from among the margins for each
- 15 of the plurality of image forming apparatuses, stored in said storing step;
- a calculating step of calculating an effective image area found from the optimum margin selected in said selecting step and a size of the sheet on which the
- 20 image formation is to be carried out;
- a determining step of comparing the effective image area calculated in said calculating step with an image to be subjected to the image formation by each of the plurality of image forming apparatuses, and determining
- 25 whether part of the image is located outside the effective image area; and
- a displaying step of displaying a warning when it

is determined in said determining step that part of the image is located outside the effective image area.

20. A distributed image forming method applied to a printing system that includes a plurality of image forming apparatuses, and distributes an image forming job to the image forming apparatuses to cause the plurality of image forming apparatuses to carry out distributed image formation, comprising:

an image area detecting step of detecting a minimum size among maximum sizes in which the image formation is can be carried out by respective ones of the plurality of image forming apparatuses, and regarding an area of the detected minimum size as a common effective image area; and

an image data adjusting step of adjusting image data to be subjected to the distributed image formation carried out by each of the plurality of image forming apparatuses such that an image to be formed based on the image data fits within the common effective image area detected in said image area detecting step.